Pest Update (August 24-31, 2011)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:
http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

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Current requests

At this time of year I often receive requests on how to grow trees from seed. A recent request on this subject was **how to start walnuts from seed**. This tree is actually fairly simple to grow from seed; squirrels do this routinely with great success considering the number of walnuts that germinate in gardens and other prepared soils! The trick is to think like a squirrel. Harvest the seeds as soon as they drop and plant them this autumn while the soils are still warm. The seed will not initiate growth this fall, but germination next spring improves if they are exposed to several weeks of warm temperatures before enduring the winter cold. The planting site should be well-drained soils, gardens really are the best, and cover the soil with a light mulch, straw or leaves that will not mat such as oak leaves (do not use maple or basswood leaves, nor grass clippings as these tend to mat). The only trick is removing the husk of the fruit to find the seed.

First begin gathering the nuts as soon as the first few start dropping from the tree. Once they begin to drop naturally, shaking branches with a long pole can encourage more to fall; however, do not pull the nuts off the branches. Also do not wait too until they have all fallen on the ground and dried. The walnuts should be harvested while they are still firm but green – once they dry and harden they are near impossible to crack. The next step, after gathering the walnuts is to change into clothes you don't plan on keeping as well as wear an old pair of gloves. Now find a hard surface to hammer open the husk. You might not want to use your sidewalk or driveway as the removing the husk will create a dark green, oily stain that does not easily wash off from most surfaces. Some people cover the surface with thick cardboard to reduce staining; others use the neighbor's driveway. Once the husk has been hammered apart and the seeds extracted, let them dry for a day or two (and place them where the squirrels cannot find them) then plant. A good rule is to plant the walnut seed at a depth equal to three times its diameter. Finally sit back and wait till spring, and if the squirrels have not found your seeds you will probably be rewarded with 50 to 80% germination.

If interested in harvesting nuts for you (rather than leaving them for the squirrels), here are a few tips additional tips First hulling by hand is a very labor-intensive process and can be sped up by using a corn sheller. After hulling is completed, wash the nuts and place them in a tub of water. The edible nuts will sink; those with only partially developed kernels will float. After completing the float test, lay out all the "sinkers" in a cool dry place for about 2 weeks. After that the kernels can be eaten or stored for later.

The flood waters are receding and now the task of clean-up begins. A critical task to complete is removing the sandbags around any trees as soon as possible. There are numerous spots where trees actually became part of the levees and many of these trees have 3 to 8 feet of sandbags stacked up on the trunks. These bags need to be removed so the lower trunk and root flare is exposed to the air. Also any silt that has been deposited around the trees should be removed.

We are already seeing the decline and death of many trees as a result of enduring several month of flooding. The extent of injury is depending upon several factors, the depth and flow of the water being two key ones, but there are also species differences. Generally any fruit tree – apple, crabapple, cherry, peach – died within the first month of flooding along with any buckeyes and sugar maples. A number of other trees survived longer – bur oaks and hackberries – but many of these trees died by the third month. The trees that appear to be still surviving include boxelder, cottonwood, green ash, honeylocust, and willow.

Upcoming events

Mountain pine beetles are still actively flying in the Black Hills. The flight usually continues until mid-September so newly infested trees will still be appearing for another couple of weeks. After this time passes, the process of identifying and treating infested trees can begin. The South

Dakota Division of Resource Conservation and Forestry is planning a series of workshops on mountain pine beetle to help landowners identify and treat infested trees this fall. The workshops will be held on the following dates and locations:

Date	Time	Location
September 8th	6:00 pm	Walter Taylor 4H Building Rapid City
September 10th	9:00 am	Hill City High School Theater
September 10th	2:30 pm	Brownsville VFD

The workshops are expected to last about 2-hours. There is no charge. For more information please call 605-394-2395.

E-sample

Pine needle scale is a common problem on mugo pines but it can also be a serious threat to spruce. This picture shows a heavy infestation by this insect on blue spruce. Pine needle scale is an armored scale so it does not produce honeydew that sticky substance associated with soft scales and aphids. Control of armored scales is more difficult than soft scales as there are fewer pesticides that are effective. The best control is a late dormant oil application to suffocate the eggs which are beneath the white "bumps" on the foliage. Oil will kill the scales but not harm the parasites and predators that feed on scales and provide much of the control. Unfortunately oil application on blue spruce will wash away some to most of the blue coloration. The other possibility is to apply an insecticide containing acephate when the lilacs begin to bloom. This application is directed against the crawlers – the young, mobile scale insects - after the hatched from beneath the shell of their dead mom.

Samples received

Brown County **There are a few Black Hills spruce on Allen's farm that are showing dead spots. What might be the problem?**

The trees appear to be in a low area (at least based on the picture) and no spruce is tolerant of poorly drained soils. I also found some of the "nests" created by the spruce needleminer. The best control for this insect would simply be a high-pressure stream of water through the trees next April. This will dislodge the caterpillars and once this is done rake up the fallen needles (and miners) and burn.

Corson County **What is wrong with this 30 year old spruce? I was wondering if pine needle scale might be the problem.**

Yes! The needles are covered with the scales. See pine needle scale under the e-samples for more information on this pest. While the pine needle scale population is enough to cause discoloration and needle drop, it would not surprise me if the lower branches are also infected with cytospora canker. This disease usually begins exhibiting symptoms when the spruces are about 20 years old and the most typical pattern to the decline is the loss of the lower branches.

McPherson County **What is causing the dieback of all these woody plants?**

Anytime I receive samples of lots of different plants from a property the underlying cause is soil-related. The note mentioned that some of the trees were standing in water for a while and this is fatal to most fruit trees as well as peashrub and lilac. The pears also have pear scab, a disease mentioned in the Union County sample also in this Update. My suggestion would be to prune the peashrub and lilacs to within 3 inches of the ground this late winter and see if they recover next year.

Union County **What is causing the discoloration and needle cast on these concolor firs?**

Concolor fir, otherwise known as white fir, is an attractive evergreen tree noted for its soft bluish to silvery green foliage. There are excellent examples of this tree throughout southeastern South Dakota but it is also very susceptible to winterburn, particularly if planted in a location exposed to the dry winter winds. This last winter was very tough on this evergreen and I have seen numerous examples of winter injury this year.

Union County **What is causing these blotches on the pears?**

This is pear scab, a fungal disease that affects the foliage and the fruit. Infected fruit often becomes distorted and covered with dark, corky blotches and spots. The disease can be managed with applications of captan beginning at bud-break and continuing every 10-day till mid-June.